abcam

Product datasheet

HRP Anti-ATPB antibody [3D5] - Mitochondrial Marker ab197905

1 Image

Overview

Product name	HRP Anti-ATPB antibody [3D5] - Mitochondrial Marker
Description	HRP Mouse monoclonal [3D5] to ATPB - Mitochondrial Marker
Host species	Mouse
Conjugation	HRP
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mouse, Rat, Cow, Caenorhabditis elegans, Monkey
Immunogen	The details of the immunogen for this antibody are not available.
Positive control	WB: Human heart mitochondrial lysate. HeLa and HepG2 whole cell lysates.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. Store In the Dark.
Storage buffer	pH: 7.40 Preservative: 0.1% Proclin 300 Solution Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS
Purity	Affinity purified
Purification notes	Near homogeneity as judged by SDS-PAGE. The antibody was produced in vitro using hybridomas grown in serum-free medium, and then purified by biochemical fractionation.
Clonality	Monoclonal

Clone number	3D5
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab197905 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/5000. Detects a band of approximately 52 kDa (predicted molecular weight: 52 kDa).

Target

Function	Mitochondrial membrane ATP synthase (F(1)F(0) ATP synthase or Complex V) produces ATP from ADP in the presence of a proton gradient across the membrane which is generated by electron transport complexes of the respiratory chain. F-type ATPases consist of two structural domains, F(1) - containing the extramembraneous catalytic core, and F(0) - containing the membrane proton channel, linked together by a central stalk and a peripheral stalk. During catalysis, ATP synthesis in the catalytic domain of F(1) is coupled via a rotary mechanism of the central stalk subunits to proton translocation. Subunits alpha and beta form the catalytic core in F(1). Rotation of the central stalk against the surrounding alpha(3)beta(3) subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta subunits.
Sequence similarities	Belongs to the ATPase alpha/beta chains family.
Cellular localization	Mitochondrion. Mitochondrion inner membrane. Peripheral membrane protein.

Images

Western blot - HRP Anti-ATPB antibody [3D5] - Mitochondrial Marker (ab197905)

All lanes : HRP Anti-ATPB antibody [3D5] - Mitochondrial Marker (ab197905) at 1/5000 dilution

Lane 1 : Human heart tissue lysate - mitochondrial extract (**ab110337**) at 5 µg
Lane 2 : HeLa whole cell lysate (**ab150035**) at 10 µg
Lane 3 : HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate at 10 µg

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 52 kDa

Observed band size: 52 kDa

Exposure time: 2 seconds

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab197905 overnight at 4°C. Antibody binding was visualised using ECL development solution **ab133406**.